



Cisco *live!*

Cisco Unified Communications with CME, CUE, SRST: Deployment Scenarios, Management and Security

BRKUCC-2301



Agenda:

- Cisco Unified Communications Manager Express
- Cisco Unity Express
- Survivable Remote Site Telephony
- Security of CUCME
- Management Tools

Integrated UC Architecture on the ISR/ISR G2

Only Cisco UC uses the full power of the Network.



Deployment Flexibility
Superior Voice Quality
Lower OpEx, Better ROI, Green
More Efficient Use of IT Resources
Survivability, Disaster Recovery
Easier Migration to IP

UC as a Network Service

CDP • Auto QoS • VLANs • RSVP • POE
• Priority Queuing • SRST • E-911 •
Protocol Translation • Codecs • DSPs

Integrated Applications on ISRs



Cisco Unified Communications Manager Express

Simple, Affordable All-In-One Communications

- Unified Communications solution for 450 users or less based on Cisco Integrated Services Routers
- Full-featured solution that meets the needs of small and medium businesses, enterprise branch office, and service-provider-managed-service
- Provides robust networking across sites using H.323 or SIP
- Voice mail, auto-attendant and IVR capabilities with integrated Cisco Unity Express or Unified Messaging with Cisco Unity and Cisco Unity Connection
- Configure as PBX, Key Switch or hybrid mode for business continuity
- Options include: Video Telephony, Tele-workers, Cisco IP Communicator soft phone, B-ACD call routing, SIP phone support, plus integration with Cisco Unified Communications Manager



Cisco Unified Communications Manager Express



Benefits

Complete Business Communications systems: Voice, Video, Voicemail, Auto-Attendant, Desktop Call Control, IVR, XML, Gateway, Mobility

Lower Total Cost of Ownership (TCO) and improved employee productivity

Integrated Mobility and UCC Mobility keeps employees always connected

Integration with UC collaboration services to provide presence, IM, conferencing and VM

Flexible deployment models for teleworkers

Integration with multiple applications from different market verticals: retail, finance, manufacturing, healthcare



Unified CME/SRST IOS Release Version Summary

CME/SRST Release Version	IOS Version
CME/SRST 4.1	12.4(15)T(7 th Release)
CME/SRST 4.2	12.4(11)XW3
CME/SRST 7.0	12.4(20)T
CME/SRST 7.1	15.0(1)M2
CME/SRST 8.0	15.1.1T
CME/SRST 8.1	15.1.2T (July 2010) (newest)
CME /SRST 8.5	15.1.3T (November 2010)

CME/SRST 7.1 with 15.0(1)M2 is the Golden Release - recommended release for most customers

CME 8.5 Update

Mobility, Capability enhancements, Improved End User Experience

New Capabilities/Endpoints

- Support for Cisco Unified IP 8900/9900 Series
- Forced Authorisation Code (FAC)
- Normalised +E.164 support for CME
- Improved deployment flexibility with support for SSL VPN client on Cisco Unified IP Phones (SCCP)
- Mobility enhancements with support for SIP flow around for FMC and single touch mobility
- Customisation of services and directories page, Programmable Line Keys, Button Layout Control
- ISDN overlap sending on PRI/BRI

Customer Benefits

- Improved Cisco IP Phone user interface
- Enhanced mobility capabilities with single touch mobility
- Improved usability of UC system with support for “+” dialing
- Reduced cost for remote teleworker solutions

Partner Benefits

- New opportunities to position CME in markets requiring overlap sending capabilities



Cisco 8900/9900 Phone Portfolio

9971



Executive

9951



Manager

8961



Knowledge Professionals

Highlights

- Wi-Fi and Bluetooth
- 12 button Programmable Line/Feature Keys
- 5.6 inch VGA colour screen with touch screen
- Programmable soft label keys – touch
- Native USB camera with video screen
- Multimedia applications: XML, Midlets

Highlights

- Bluetooth support
- 10 button Programmable Line/Feature Keys
- 5 inch VGA colour screen
- 4 Programmable soft keys
- Native USB Camera
- Multimedia applications: XML, Midlets

Highlights

- 10 button Programmable Line/Feature Keys
- 5 inch VGA colour screen
- 4 Programmable soft keys
- Multimedia applications: XML, Midlets

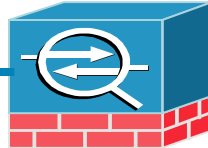
CME VPN Phone with Cisco ASA

Low cost secure communications

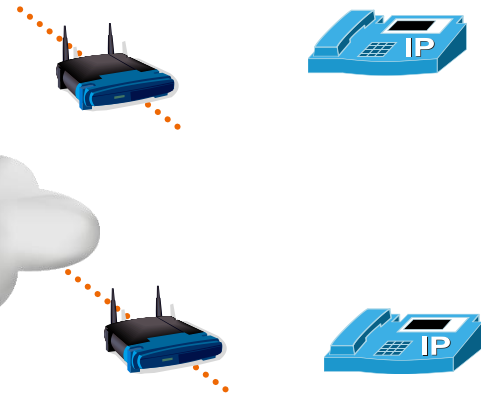
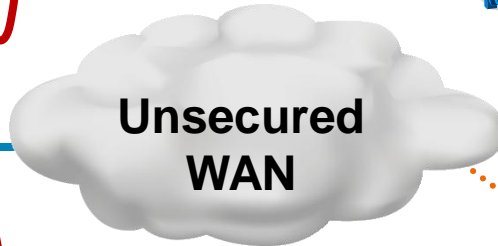
- **Secure communications anywhere connectivity is available**
- **Low cost remote teleworker solution without need for teleworker router**



CME



Cisco
ASA



- **Features:**

- SSL VPN connection between remote phone and Cisco ASA

- Supported phones: 7942G, 7945G, 7962G, 7965G and 7975G (SCCP only)

Fixed Mobile Convergence (FMC) with SIP

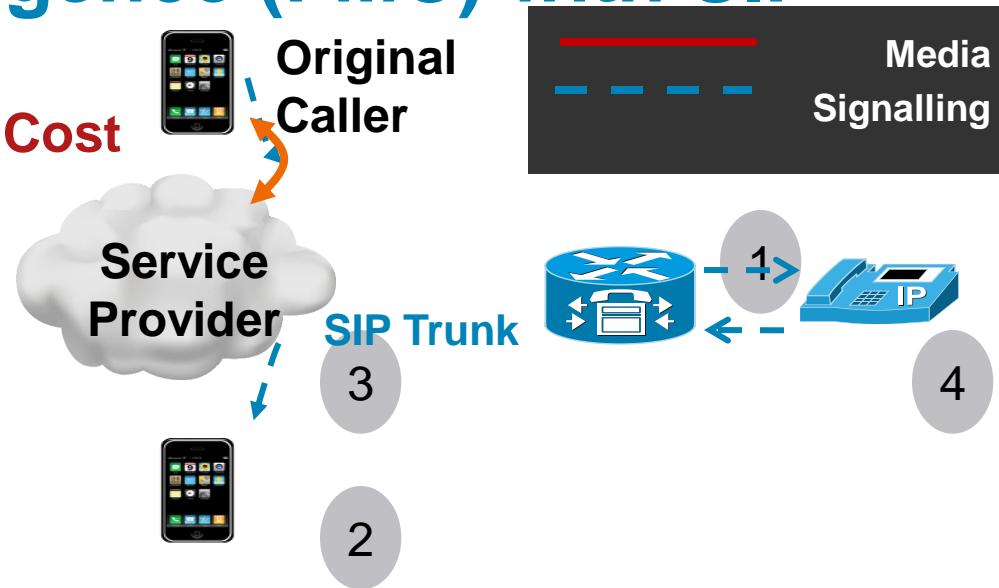
Flow Around

Reduced Telecommunications Cost

- SIP Media Flow Around removes need to hairpin PSTN to PSTN call
- SNR calls can be pulled back to desktop phone
- Benefits

Lowers cost of ownership by reducing costs on SIP trunks

Improves WAN link efficiency



- 1 PSTN caller rings internal extension
- 2 No answer, SNR service forwards call to PSTN
- 3 Media Flow Around on SIP Trunk
- 4 Desktop user has ability to pull call back

Forced Authorisation Code (FAC)

Improved Accounting and Billing

- FAC regulates the type of calls a user makes
- Tracks calls to non toll-free, long distance and international numbers for accounting and billing purposes
- User is prompted to enter valid username/authorisation code before call is placed
- FAC authentication can be local or through Radius
- FAC data stored in CDR records
 - CDR can be stored in router flash, external FTP server, or Syslog
- Applicable for multiple endpoints
 - Applicable to SCCP, SIP phones, Analog phones

CME Services Page

Pre-CME 8.5

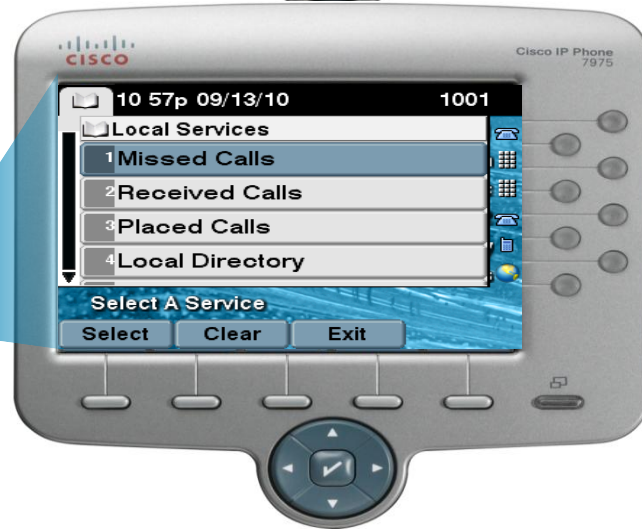
- User has access to all services configured on system
- Accessible by clicking on “**Services**” button on phone
- “**My Phone Apps**” provides access to speed dial buttons, personal speed dial buttons, reset phone, Single Number Reach
- “**Directories**” buttons services access to call history and local directories



“**Services**”
Page



“**Directories**”
Page



Customisable Services Page

CME 8.5

- Administrator can customise what services a phone provides
- Additional security for lobby phones by preventing access to **services** and **directories** page
- Can be configured on ephone or ephone-template
- **Benefits**
Improves security for phones in common areas with guest users



“Services” Null



```
CME#conf t
Enter configuration commands, one per line. End with CNTL/Z.
CME(config)#ephone-template 1
CME(config-ephone-template)#exclude ?
call-history call history in the missed/received/placed calls directory
directory local directory service
em extension mobility service
myphoneapp my phone apps service
```

```
CME(config)#ephone 1
CME(config-ephone)#exclude ?
call-history call history in the missed/received/placed calls directory
directory local directory service
em
myphoneapp
```

My Phone Apps for BLF Speed Dial User Interface

- **Benefits**

 - Easier configuration for end users

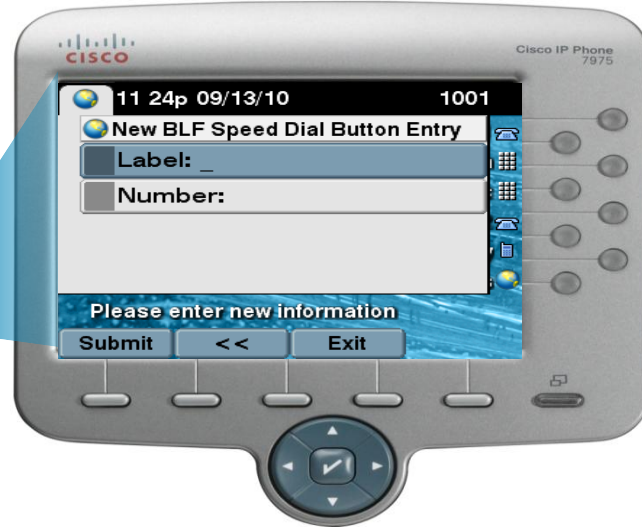
- **Pre CME 8.5**

 - Users used only IOS CLI to configure BLF Speed Dial

- **Features**

 - Configure BLF Speed Dial from **My Phone Apps**

 - Add, Delete, and Change** BLF Speed Dial configuration



Fixed Button Layout

Pre CME 8.5



Line Buttons

- Line extensions take up first N buttons
- Eg. If there are 2 extensions assigned to buttons, they take up buttons 1 and 2

Speed Dials, Busy Lamp Field

- Remaining buttons can be configured as Speed Dials and Busy Lamp Field Speed Dials

■ Button Layout

- Fixed and order of buttons populated by CME
- Speed Dials and Busy Lamp Field (BLF) buttons populate remaining buttons not used by extensions

Button Layout Control



SCCP Phone

```
ephone-template 1  
button-layout 1,4 line  
button-layout 2-3 speed-dial
```

SIP Phone

```
voice register template 1  
button-layout 1,4 line  
button-layout 2,3 speed-dial
```

■ Customisable Button Layout

- Customisable arrangement of Line Buttons, Speed Dials, Feature Keys and URL button
- Applicable to both SCCP and SIP phones
- Utilise ephone-template (SCCP) and voice register template (SIP) phones
- Apply ephone-template and voice register template to phones

Programmable Line Keys (PLK)



Line Buttons

- Used for line extensions

Speed Dials

- Buttons configured as speed dials

Feature Keys

- Softkey functionality and generic night service on phone buttons

Service URL

- URLs such as EM, My Phone Apps, and other URLs on line keys

- Pre CME 8.5
 - Line keys configured only as line buttons, speed dials, BLF speed dials or privacy buttons
- PLK
 - Allows line keys to be programmed as line buttons, speed-dials, BLF speed dials, features, and URL services

Cisco Unified CME 8.5 - IP Phone Portfolio

Executive

Cisco Unified IP Phone
9951/9971
7975



Manager

Cisco Unified IP Phone
7962G/7965G



Business

Cisco Unified IP Phone
7942G / 7945G



Conference

Cisco Unified IP Conference
Phone
7936, 7937G



Basic

Cisco Unified IP
Phone
6901/6911/6921/6941/
6961



Multibutton

Cisco Unified IP Phone
7931G



Video

Cisco Unified IP Phone
9951/9971/8961

Cisco Unified Video
Advantage
Cisco Unified
Personal Communicator



Mobility

Cisco IP Communicator
Cisco Unified
Personal Communicator
Cisco Unified Wireless IP
Phone 7921G/ 7925G/7925G-EX



Accessories

Cisco Unified IP Phone
Expansion Module 7915/7916



Analog

Cisco ATA
Cisco VG202, VG204, VG224



CME 8.6 Update (IOS 15.1(4)M)



Collaboration , Video & Mobility Enhancements

New Capabilities/Endpoints

- Support for Cisco Mobile 8.1 iphone and ipod touch softphone client
- SSL VPN client support for IOS DTLS VPN for SCCP phones
- Support for Call Forward Unregistered
- Clear directory entries for Calls
- Localisation Support for 7925, 69xx, 89xx & 99xx IP Phones
- Video and Camera Support for 8961/9951/9971 IP endpoints
- Extension Mobility support for SIP endpoints
- Increase Translation Rule from 15 to 100
- Bulk Registration Support for SIP Phones

Partner Benefits

- New opportunities to position Low cost video telephony with Cisco 8900/9900 video IP Phones with CUCME
- Position as a low cost remote teleworker solution with IOS DTLS SSL VPN solution



Cisco Mobile 8.1

Benefits of Cisco Mobile 8.1

- **Lower Mobility Costs**

You can place and receive calls when at home, in hotels, or Wi-Fi hotspots

Reduce mobile minutes and save on roaming charges

- **Mobile Privacy**

Cisco Mobile 8.1 turns your iPhone into an extension on your Cisco UC system

Keep mobile number private through office dialing

- **Enterprise Telephony Features**

Cisco Mobile 8.1 offers enterprise-class telephony functions including transfer, conference, hold and resume, park and



CME Third-Party SIP Phone Support

- Cisco CME conforms with the IETF RFC 3261 standard for SIP
- CME versions 4.1 and later support SIP IP phones
- The Cisco Technology Developer Program (TDP) introduced testing support for Cisco Communications Manager with third-party SIP endpoints in 2006
- Cisco's recommendation is to utilise TDP or tekVizion service

http://www.tekvizionlabs.com/3rdpartyprograms/sip_verification/verified_products.php

- Cisco CME deployed with third-party SIP IP phones / endpoints **is a supported solution** by Cisco TAC

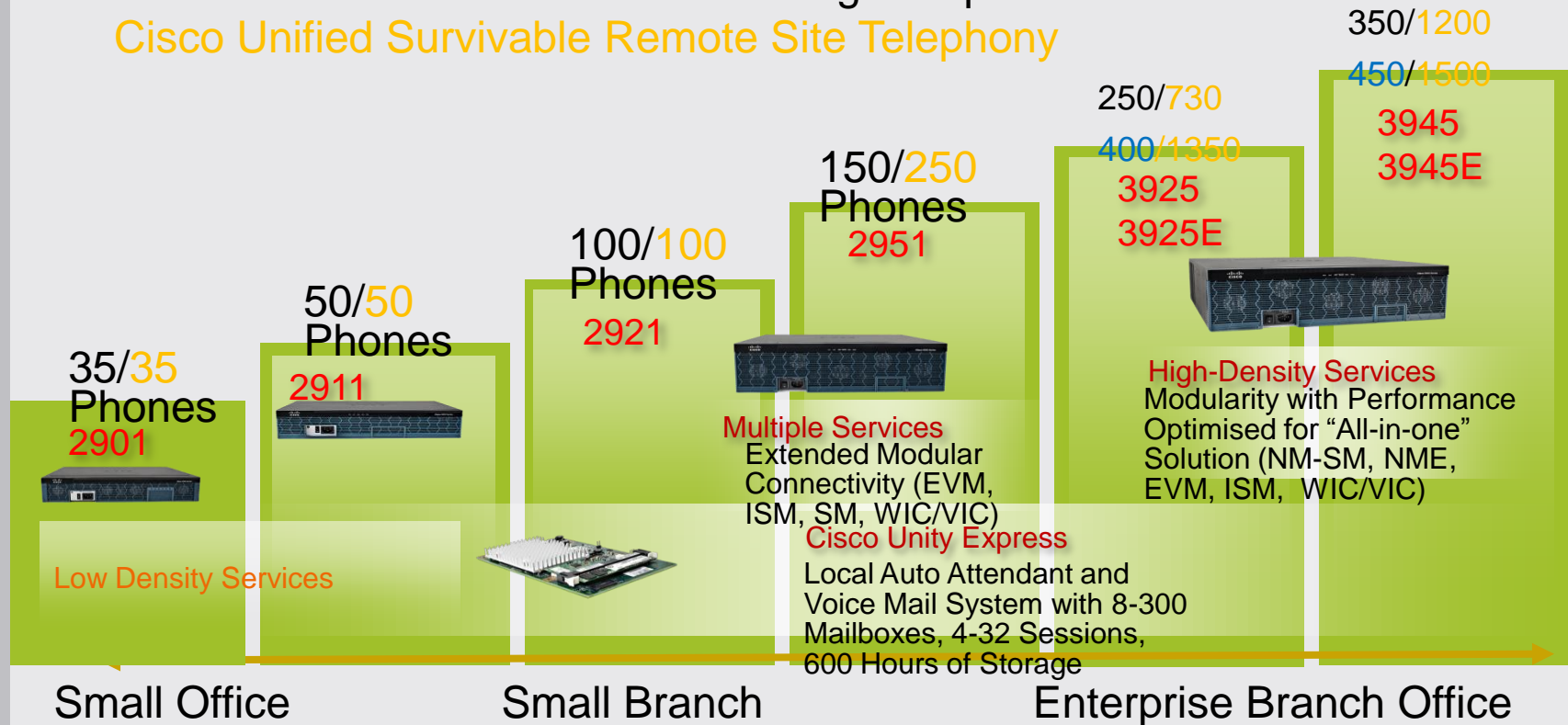


Cisco Integrated Services Router (ISR)G2 Portfolio for Unified Communications

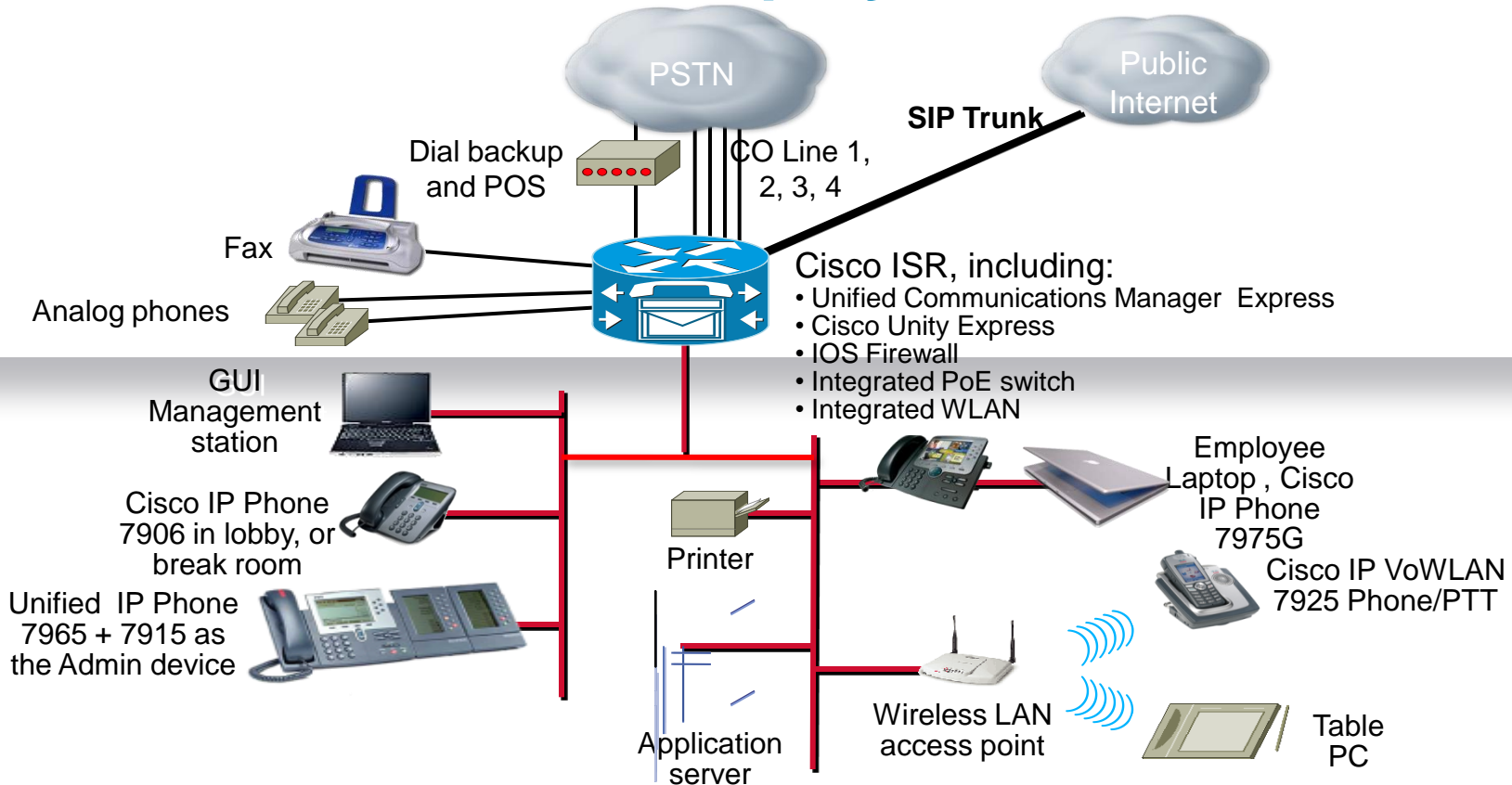


Concurrent Services and Performance

Cisco Unified Communications Manager Express
Cisco Unified Survivable Remote Site Telephony

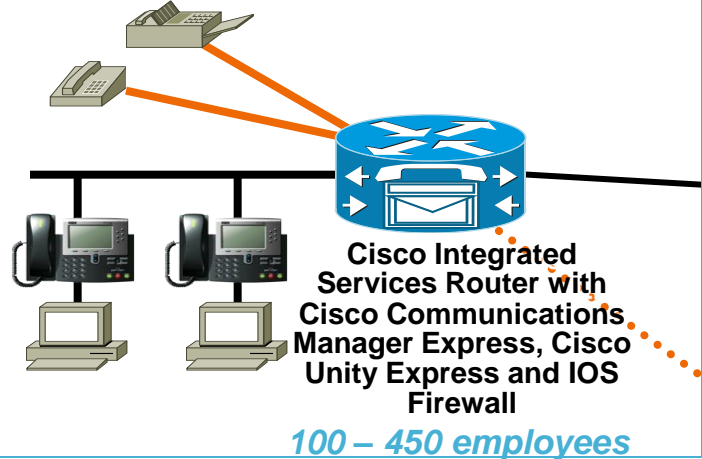


Cisco Unified Communications Manager Express: Standalone Office Deployment



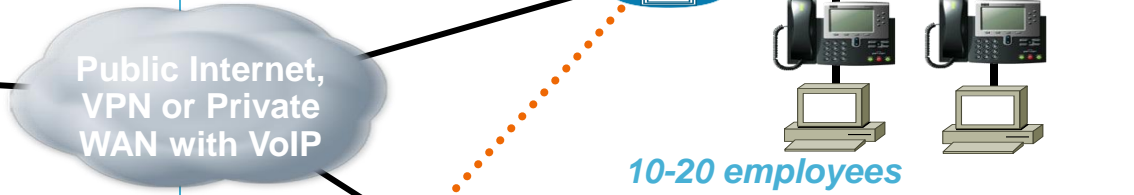
Unified Communications Express: Distributed Enterprise Branch Office

Main business location



Cisco Integrated Services Router with Cisco Communications Manager Express, Cisco Unity Express and IOS Firewall

Branch Location



PSTN

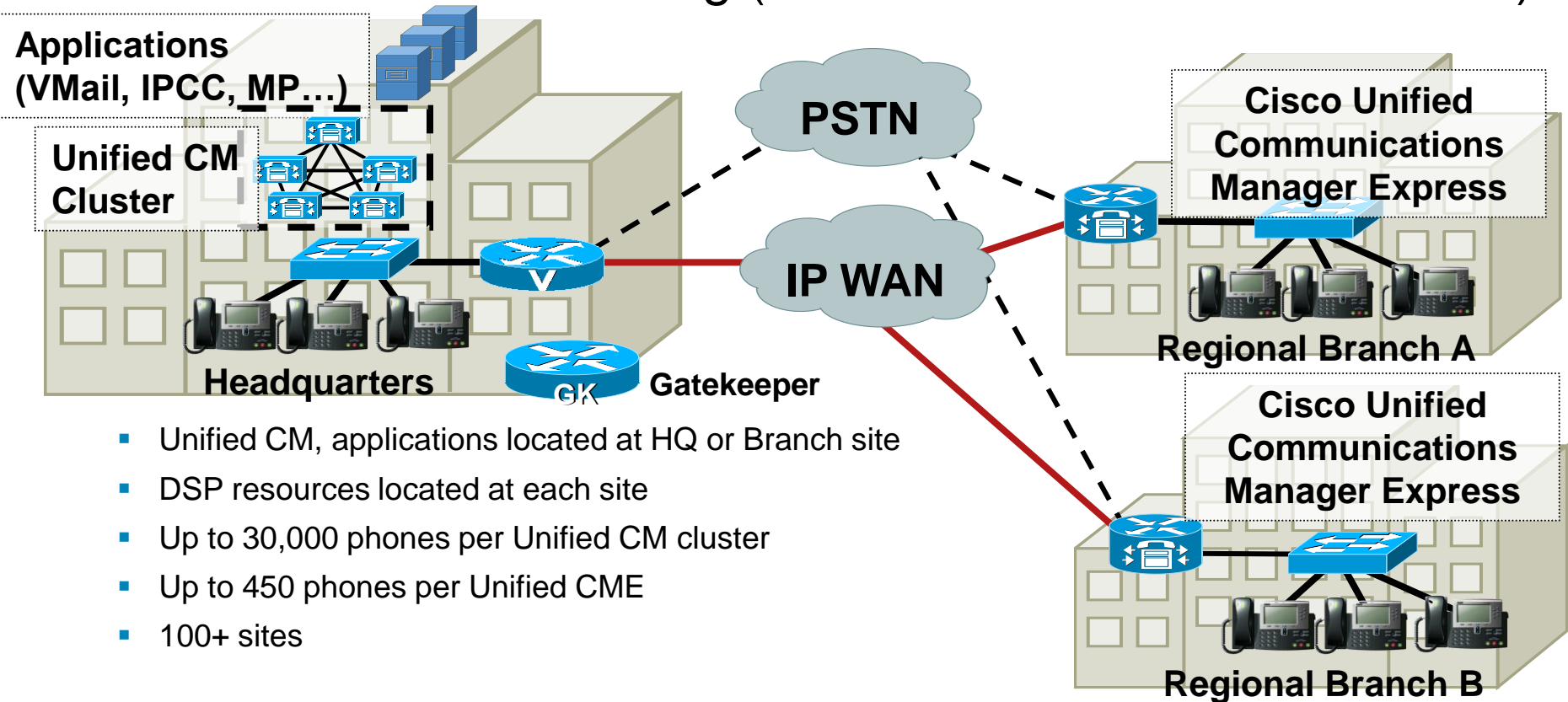
Distribution Centre



- Networked Call Processing
- Networked Voice Messaging
- Extension dialing between sites
- Toll Savings
- Calling Name, Number
- Intelligent Call FWD & Transfer

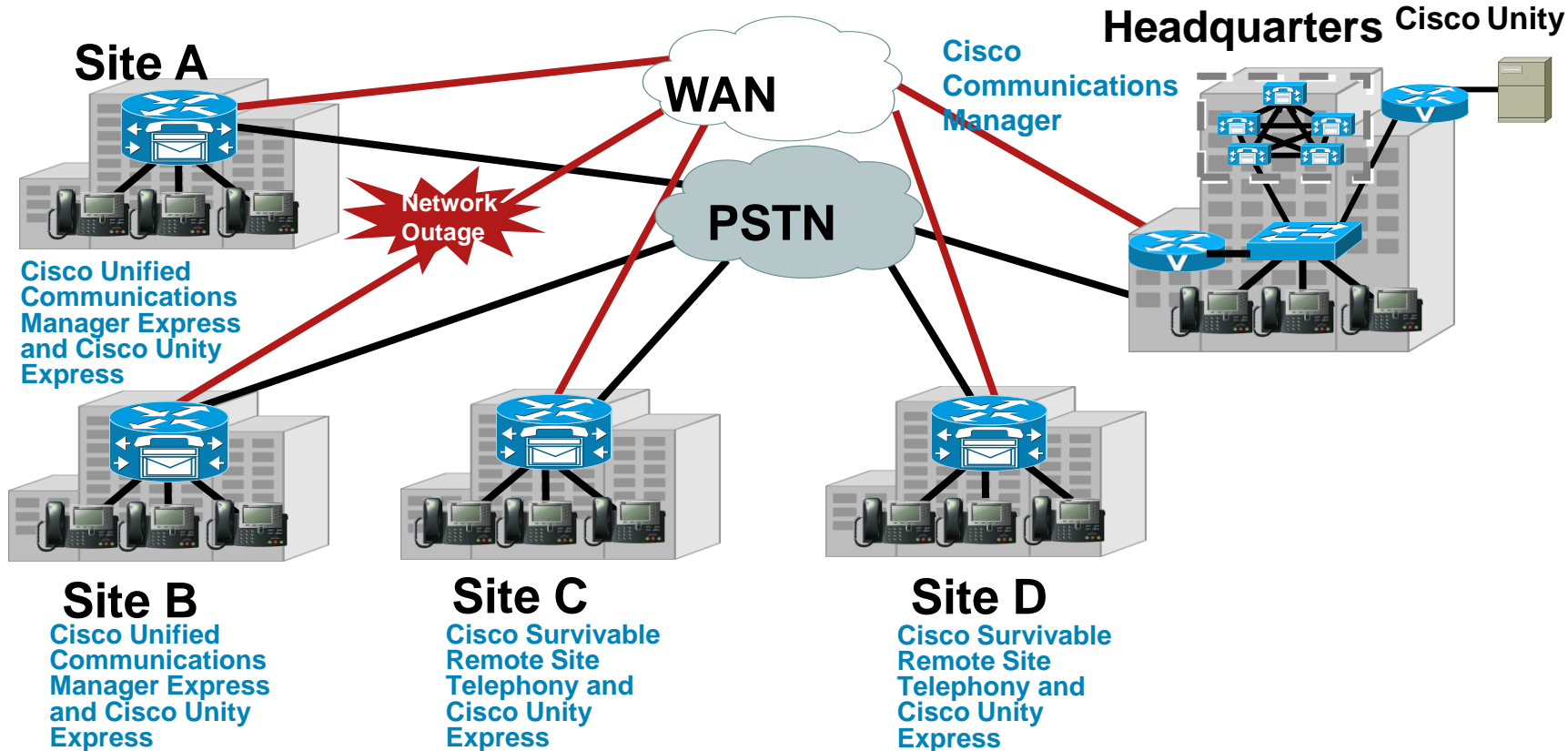
Deployment Models

Distributed Call Processing (Unified CM-Unified CME Model)



- Unified CM, applications located at HQ or Branch site
- DSP resources located at each site
- Up to 30,000 phones per Unified CM cluster
- Up to 450 phones per Unified CME
- 100+ sites

IP Telephony solutions combining CME & CCM: Delivering Multi-Site, Centralised Systems with Failover



Cisco Unity Express



Cisco Unity Express: The Basics

- Cisco Unity Express is a cost-effective voicemail and integrated messaging system with Automated Attendant and optional interactive voice response (IVR) for the branch office or small office
- The system supports Cisco Unified Communications Manager or UC Manager Express deployment scenarios
- The platform is a Cisco integrated services router: Industry-leading Cisco 1861, 2800, 2900, 3800 and 3900 Series.
- The message store is a choice of network module, advanced integration module, or the new service modules.
- The system offers up to 500 mailboxes, 32 ports and 600 hours of storage.
- The system supports 22 languages.
- Add the TimeCardView application for time card data management.
- Deploy in survivable mode similar to Survivable Remote Site Telephony.



Unity Express Features at a Glance

- Voice Mail
 - Integrated one box voice mail solution.
 - Accessible via multiple interfaces.
- Auto Attendant
 - Automatically handle incoming calls with powerful multi-level call flows.
 - Tuned for business hours, holidays and multiple languages.
- Interactive Voice Response
 - External database integration, E-mail and fax capabilities.
- TimeCardView
 - Track employee work hours for attendance and payroll.
 - Seamlessly integrates with Intuit QuickBooks.
- Live-record
 - Record calls with one button.



Web Voice Mail (CUE 8.5 onwards)

Cisco Unity Express - User Options

aesop Log Out About Help

▼ Inbox
New Messages
Deleted Messages

► Greetings
► Notification Devices
► Private Lists
► Caller Input
► Preferences

Inbox

Compose Refresh Save Mark New Delete

aesop

Showing 1-2 of 2 10 per page Go

<input type="checkbox"/>						Type	From	Received	Size
<input type="checkbox"/>						VOICE	John White	Thu Aug 05 13:39:03 GMT-07:00 (GMT-07:00) 2010	00:10
<input type="checkbox"/>						VOICE	John White	Thu Aug 05 13:39:12 GMT-07:00 (GMT-07:00) 2010	00:10

Page 1 of 1

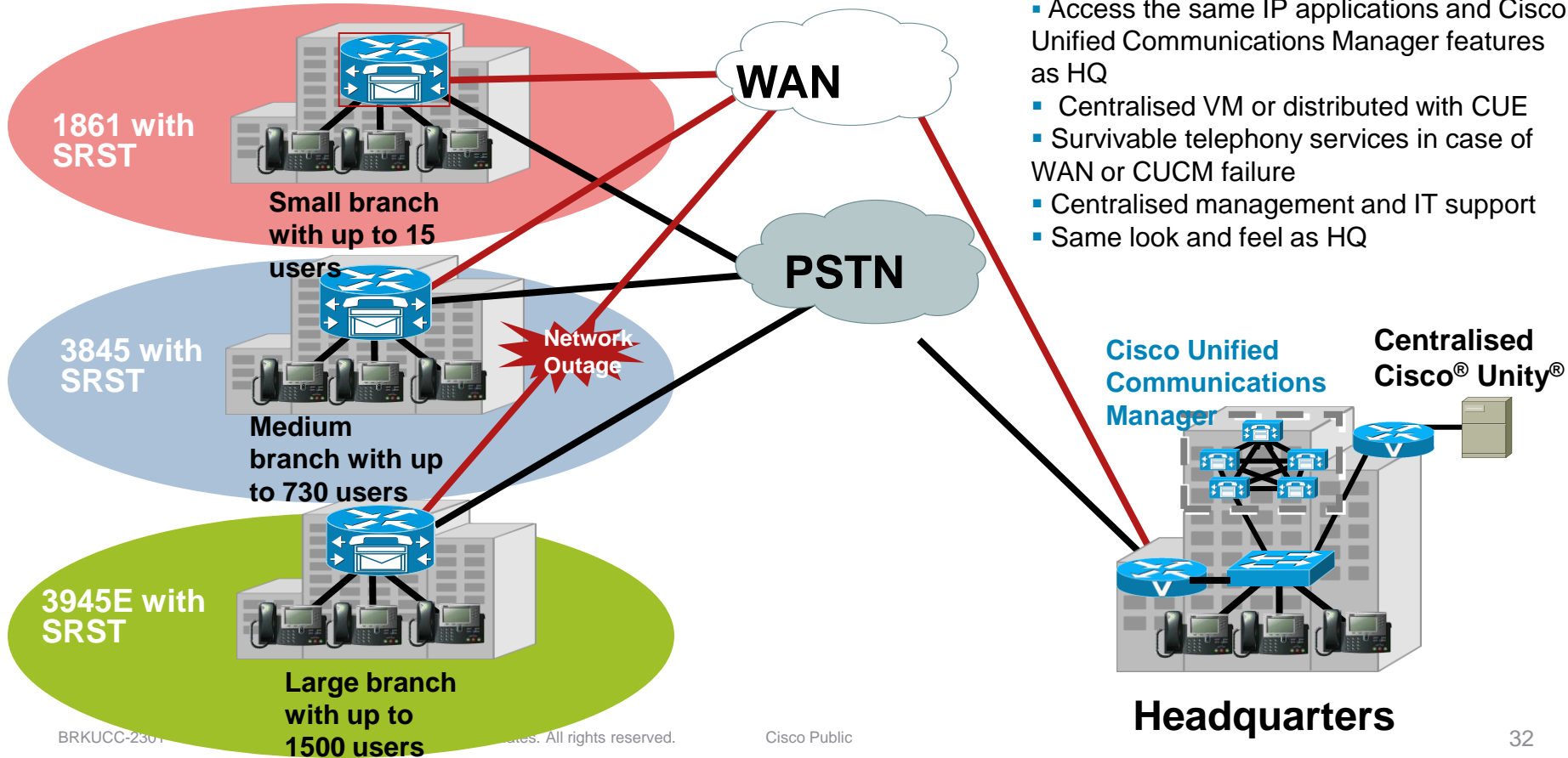
Cisco Systems © 2005 - 2010. All rights reserved.

- Listen/Save/Delete/Compose Voice Mail messages/greetings through a Web GUI interface.
- Manage all mailbox settings.

Survivable Remote Site Telephony (SRST) Deployments

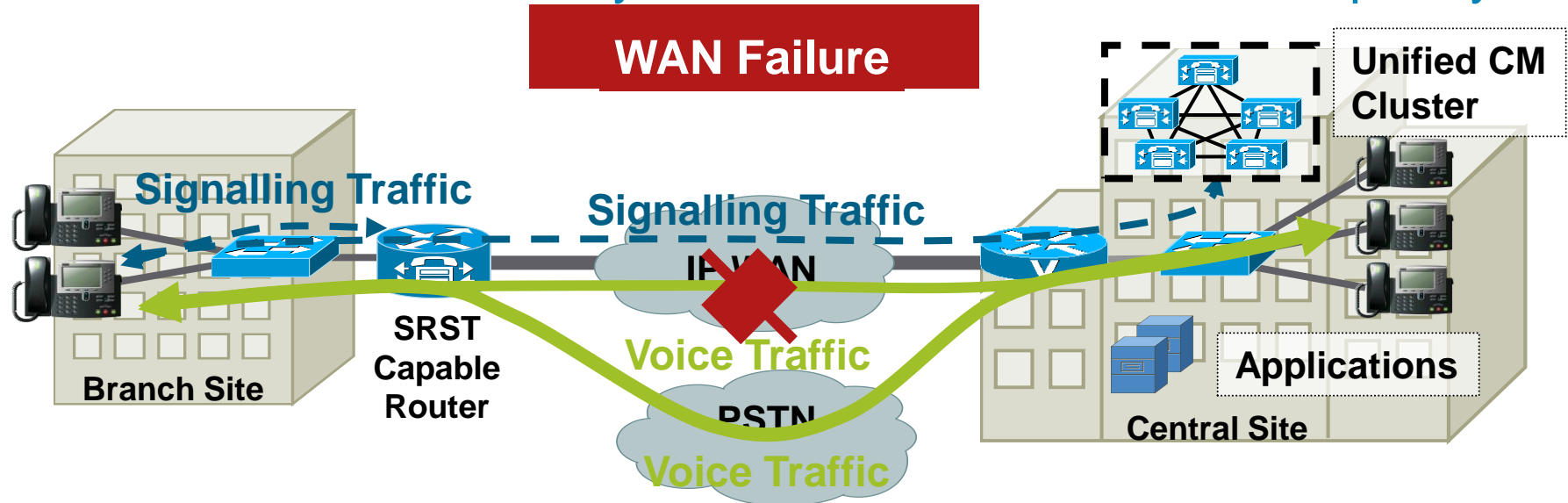


Remote Unified Communications using Cisco Unified SRST



Unified Communications Infrastructure

Failover and Redundancy: Survivable Remote Site Telephony

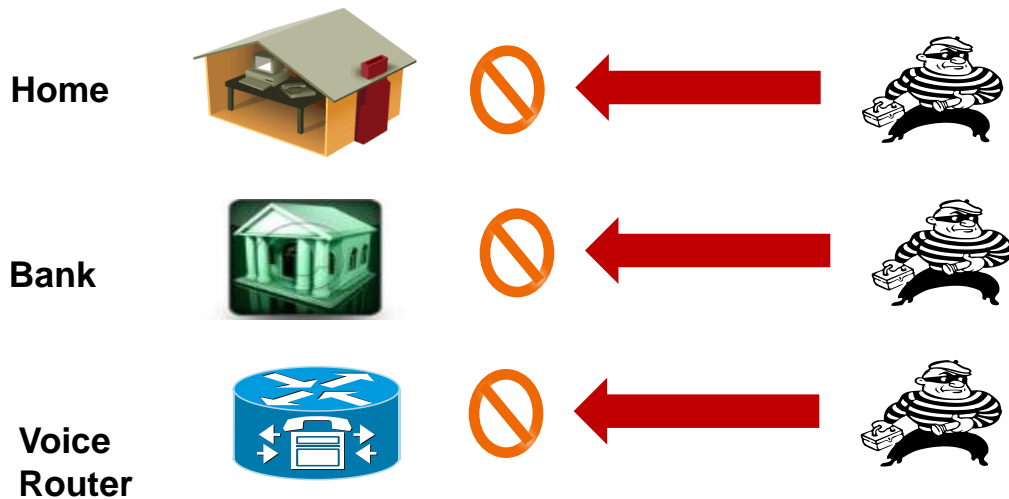


- IP Phones have SRST router IP as the last option in their CM GROUP configuration
- Support for both SIP and SCCP IP Phones
- With SRST, only a **subset** of features are available to the phones (DID, DOD, call hold, transfer, speed dial, caller ID, etc.)

Security on CUCME

Why is Voice Security Important?

- VoIP security is becoming critical concern for customers
 - Legacy voice system migration to IP is rapidly accelerating
 - Growing popularity of VoIP makes it target for attacks
 - SIP adoption brings new vulnerabilities



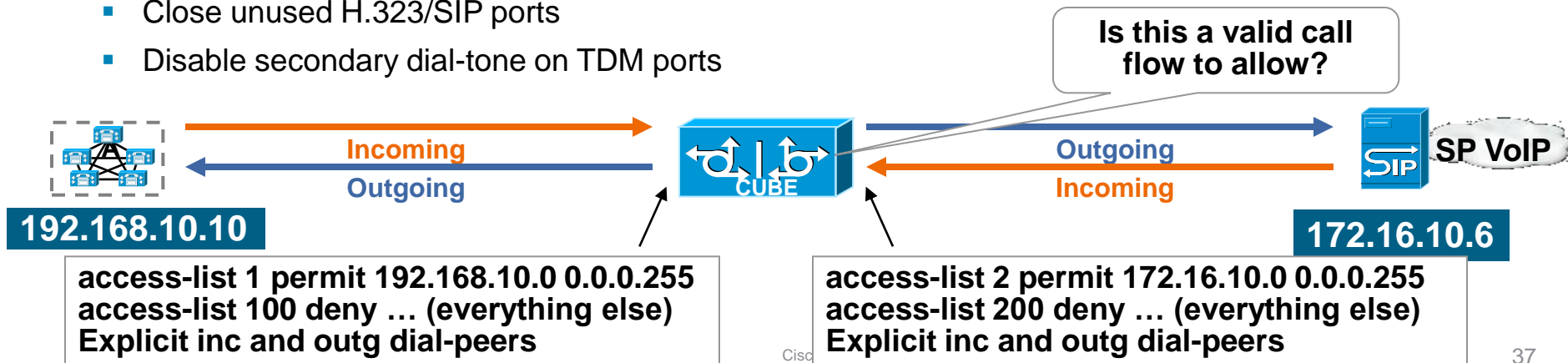
Secure your system!

Background

- Increase rate of toll-fraud occurrence for customers with Cisco voice solutions
 - Hackers scan unsecure boxes for open port 5060
 - Free SIP Clients
- Methods of Toll-Fraud
 - Internal – Internal employee misusing system to make fraudulent calls
 - External – External parties misusing unsecured Cisco routers to make fraudulent calls
- External Toll-Fraud occurs because of improperly configured voice systems
 - Access-list not configured to prevent invalid inbound VoIP calls
 - Misuse of Secondary dialtone

Toll Fraud—ACLs, Dial-Peers

- Use ACLs to allow/deny explicit sources of calls
- Apply explicit incoming and outgoing dial-peers to both CUBE interfaces to control the types and parameters of calls allowed on the network
- Use explicit destination-patterns on dial-peers (not .T) to block out disallowed off-net call destinations
- Use translation rules to ensure only valid calling/called numbers allowed
- Use Tcl/VXML scripts to do database lookups or additional checks to allow/deny call flows
- Change SIP port to something other than 5060
- Close unused H.323/SIP ports
- Disable secondary dial-tone on TDM ports



Toll-Fraud Prevention Improvements

*New Default Behaviour in IOS 15.1.2T – FCS July 2010

- **direct-inward-dial isdn** enabled by default
- Feature is enabled to prevent the toll fraud for incoming ISDN calls. The called number of an incoming ISDN enbloc dialing call is used to match the outbound dial-peers

```
voice service pots  
    [no] direct-inward
```

- **Two-stage dialing service** blocked by default, no secondary dial-tone presented on inbound calls to FXO port
- Secondary-dialtone is normally initiated when an Analog or Digital FXO port goes offhook and the Private Line Automatic Ringdown (PLAR) is disabled or not configured

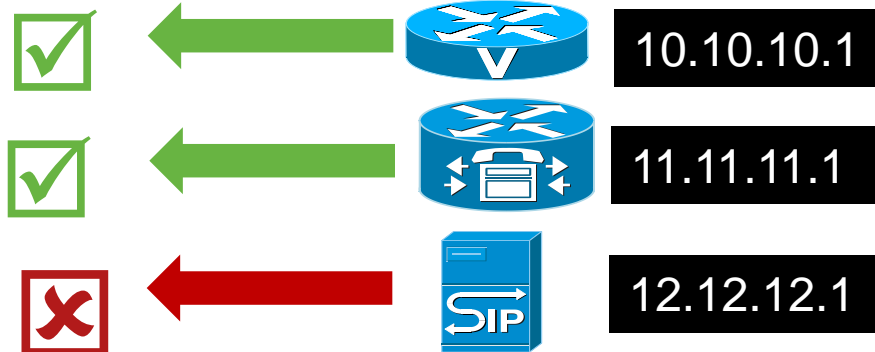
```
voice-port <fxo-port>  
    [no] secondary dialtone
```

* New behaviour can be disabled to revert back to old behaviour

Cisco Unified Communications Manager

- CUCM only accepts calls from known endpoints
- Ends are added as SIP proxies, MGCP Gateways, H.323 gateways with IP addresses into CUCM database
- Upon receiving inbound call, CUCM checks in database for IP address
 - If IP address is known, then process call
 - Otherwise, ignore and drop call

CUCM Database	
10.10.10.1	MGCP Gateway
11.11.11.1	H.323 Gateway



Toll-Fraud Prevention Improvements

- **IP address trusted authentication** is enabled by **default**
- Cisco voice router maintains an **IP address trusted list*** to validate the remote IP addresses of incoming VoIP calls
- With IP address trusted list enabled, voice router accepts incoming VoIP (SIP/H.323) calls only if the remote IP address of an incoming VoIP call is successfully validated from the system **IP address trusted list**.

```
Cisco3845#show ip address trusted list
IP Address Trusted Authentication
Administration State: UP
Operation State:    UP

IP Address Trusted Call Block Cause: call-reject (21)

VoIP Dial-peer IPv4 Session Targets:
Peer Tag      Oper State   Session Target
-----      -
-----      -
-----      -
```

Can disable IP
Trusted List

no ip address trusted

Toll-Fraud Prevention Improvements

- IP Address Trusted Authentication command lines

```
Router# show ip address trusted list
```

```
IP Address Trusted Authentication
```

```
Administration State: UP
```

```
Operation State:      UP
```

```
IP Address Trusted Call Block Cause: call-reject (21)
```

```
VoIP Dial-peer IPv4 Session Targets:
```

```
Peer Tag          Oper State      Session Target
```

```
-----
```

```
-----
```

```
-----
```

```
3000              UP
```

```
1001              UP
```

```
IP Address Trusted List
```

```
ip address trusted list
```

```
ipv4 1.5.14.13
```

Administration State	Operational State	Trigger Conditions
Down	Down	"no ip address trusted authenticate" is defined
Up	Down	"gateway" is defined and a VoIP dial-peer with "ras" as a session target is in "UP" operational status
Up	Up	"ip address trusted authenticate" is defined and either "gateway" is not defined or no VoIP dial-peer with "ras" as session target is in "UP" operational status

Toll-Fraud Prevention Improvements

IP Address Trusted Authentication Debugging

- New internal error code (IEC) **1.1.228.3.31.0** is logged when an incoming VoIP call is blocked due to IP address trusted authentication.
- Following records support IEC error reporting:
 - **VSA in RADIUS accounting stop record**
 - [Vendor 9/1] cisco-avpair = "internal-error-code=1.1.228.3.31.0"
 - **Call history record**
 - router#show call history voice | i InternalErrorCode
 - InternalErrorCode=1.1.128.3.31.0
 - **Dial Control MIB** (cCallHistoryIecTable object of CISCO-DIAL-CONTROL-MIB)
 - getmany 10.7.102.32 cCallHistoryIec
 - cCallHistoryIec.5.1 = 1.1.128.3.31.0
 - **Syslog message** (once "voice iec syslog" is enabled)

*Aug 14 19:54:32.507: %VOICE_IEC-3-GW: Application Framework Core: Internal Error (Toll fraud call rejected): IEC=1.1.228.3.31.0 on callID GUID=AE5066C5883E11DE8026A96657501A09

Configuration and Management Tools for CUCME



Cisco Configuration Professional (CCP)

Intuitive device management GUI for easily configuring access routers

- Windows Based Application
- Latest version: 2.3
- GUI based
- Device Management tool for access routers (ISR and ISR-G2)
- Unified GUI
 - Security, Voice
 - License Management
 - Appl Module Management
- Valuable productivity enhancing tool for network administrators and channel partners for deploying routers with increased

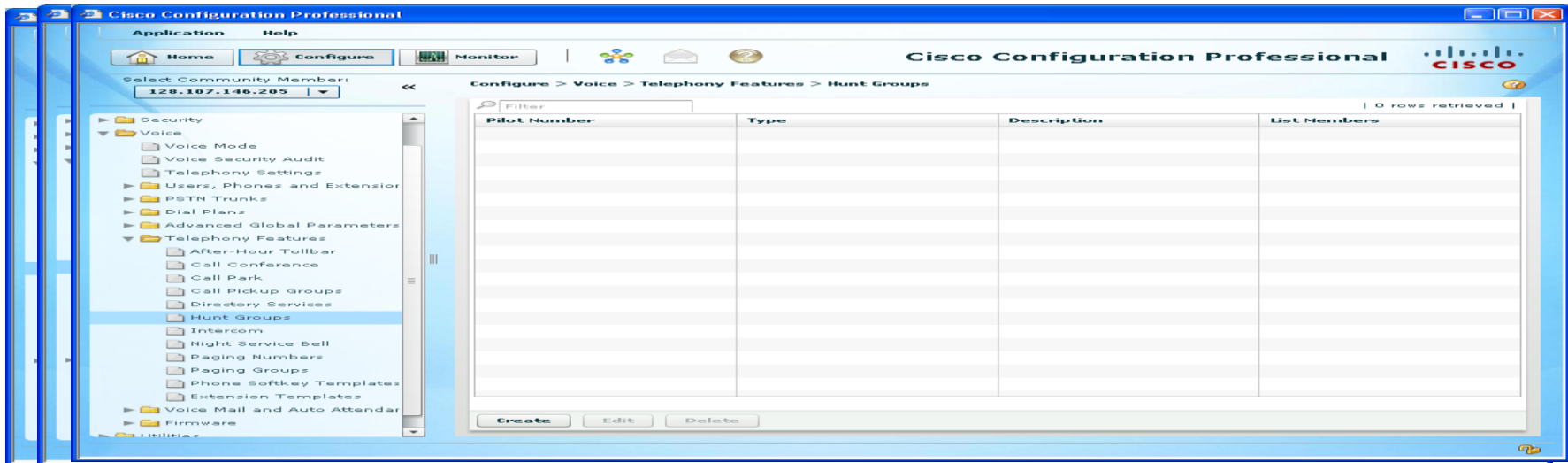
www.cisco.com/go/ciscocp

The screenshot shows the Cisco Configuration Professional (CCP) application window. The title bar reads "Cisco Configuration Professional". The interface includes a menu bar with "Application" and "Help", and a toolbar with "Home", "Configure", and "Monitor" buttons. A "Select Community Member" dropdown is set to "128.107.146.205". The main content area is divided into several sections:

- Navigation Pane (Left):** A tree view showing categories such as Interface Management, Router, Security (with sub-items like Security Audit, Firewall and ACL, ACL Editor, VPN, VPN Components, AAA, Advanced Security), and Voice (with sub-items like Voice Mode, CME as SRST Settings, Users, Phones and Extensions, PSTN Trunks, Dial Plans, Advanced Global Parameters, Telephony Features, Voice Mail and Auto Attendant, and Utilities).
- Home > Community View:** A section titled "Cisco Configuration Professional News" with a table of news items. Below it, a "Community Information" section includes a filter input and a table of discovered devices.

IP address / Hostname	Router Hostname	Connection Type	Discovery Status
172.27.108.23	CCP-2951	Non secure	Discovered
128.107.146.205	2811shankar	Non secure	Discovered with warnings

At the bottom of the interface, there are buttons for "Manage Devices", "Delete", "Discover", "Discovery Details", "Cancel Discovery", and "Router Status".



■ CME Mode

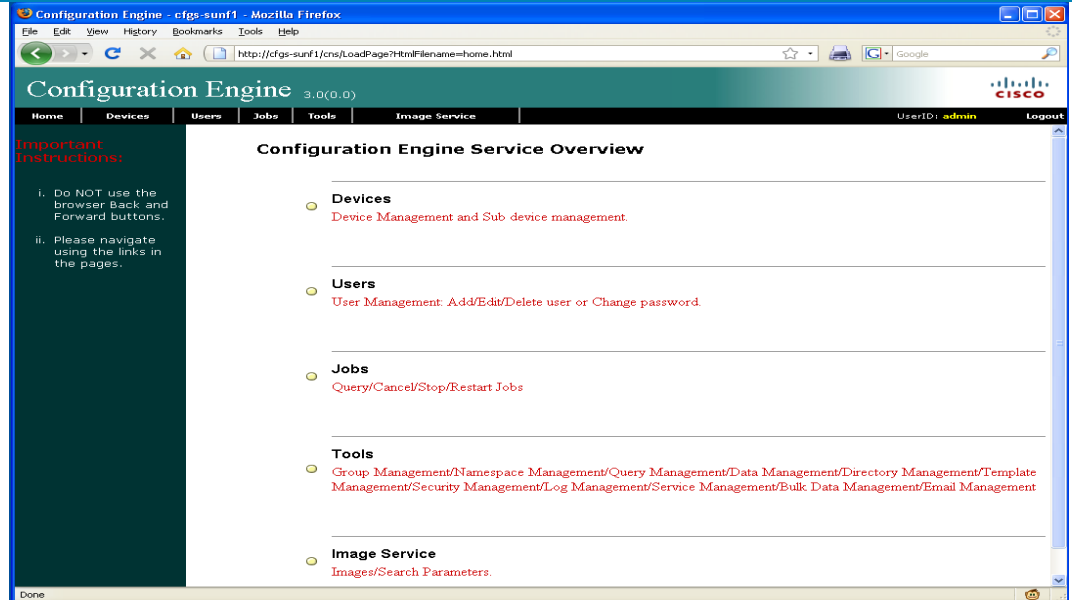
- Creation of Users, Phones, Extensions and Mailboxes
 - Analog and Digital Tunks
 - Dial Plans
 - **Telephony Features:** Paging groups, Night-Service, Intercom, After-hours, Hunt Groups, Call Park, Pickup groups, Conferencing, Single Number Reach
 - Phone Firmware Support, IOS upgrade, MOH file management

Cisco Configuration Engine

Scalable, Secure Solution to *Automate* Distribution of Cisco® IOS® Software Configuration and Images to Cisco Routers and Switches

■ Cisco Configuration Engine Product Features

- Day 0 operations
 - Highly efficient and scalable initial deployment
- Day-2+ operations
 - Bulk Cisco IOS Software image upgrades
 - Bulk configuration changes
- Template-based configurations
- Web-based GUI
- Web services API
- Secure access over SSL
- Supports RedHat Linux, Solaris and Vmware

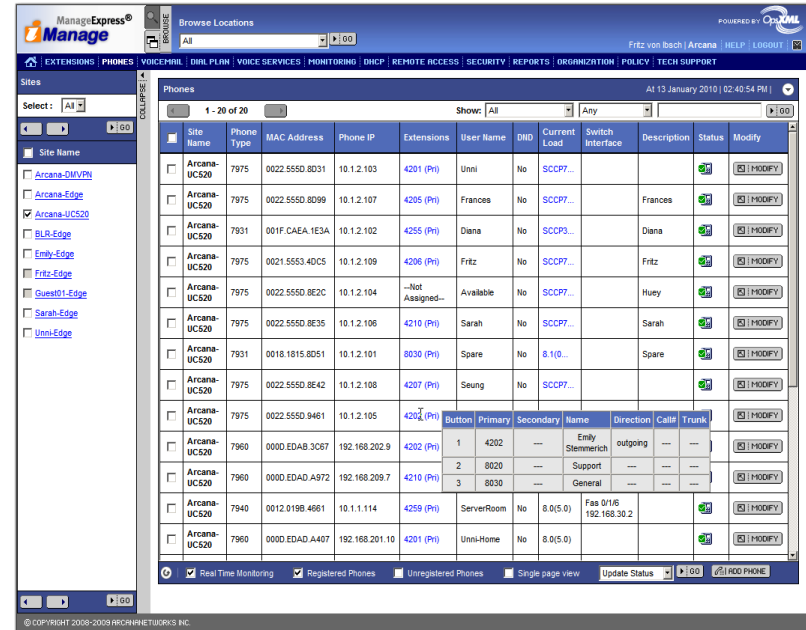




ManageExpress[®] iManage 7.1 Enterprise Overview

What is ManageExpress iManage?

- Secure graphical network management tool for Cisco ISR/ISR G2s, UC500s, and IADs
- Centralised management of voice, data, security and remote access technologies
- Simplifies moves, adds, changes, across the enterprise
- Enforces consistency and simplifies tasks reducing operational costs
- Provisioning, Monitoring, Reporting, and Operational views
- Delivers ready to consume business metrics

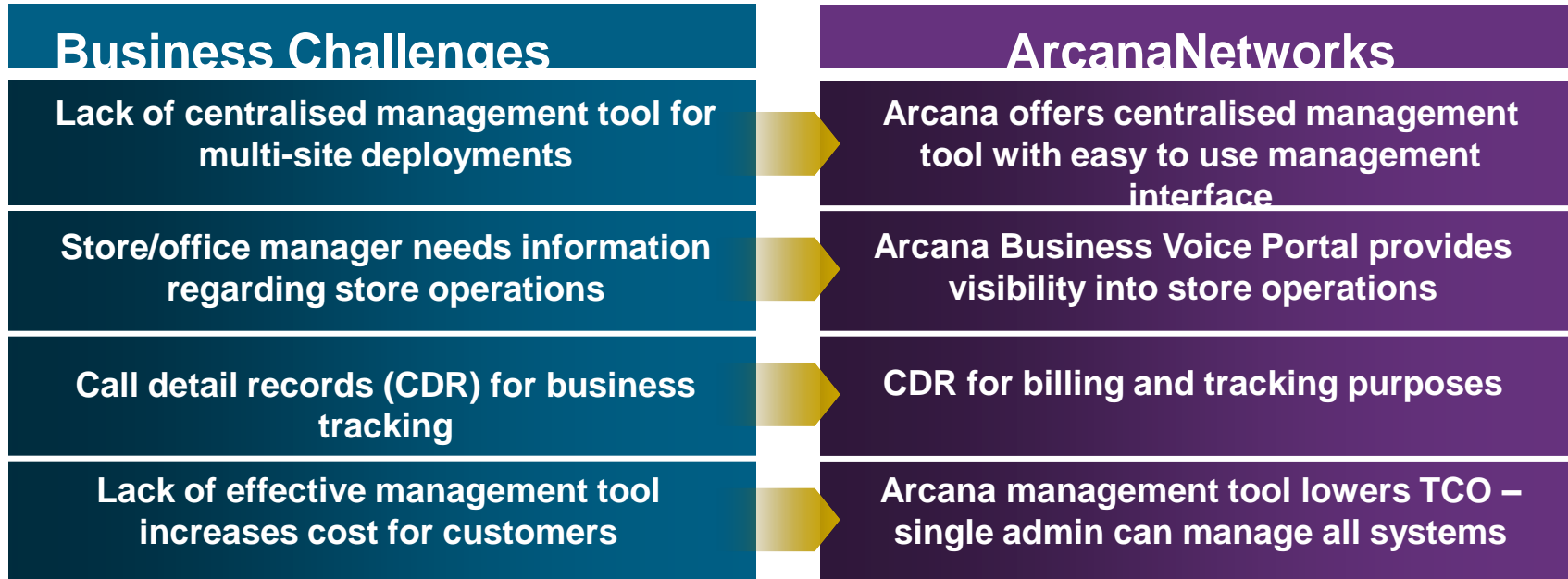


The screenshot displays the ManageExpress iManage web interface. The top navigation bar includes tabs for EXTENSIONS, PHONES, VOICEMAIL, DIAL PLAN, VOICE SERVICES, MONITORING, DHCP, REMOTE ACCESS, SECURITY, REPORTS, ORGANIZATION, POLICY, and TECH SUPPORT. The main content area shows a table of phone configurations under the 'Phones' section. The table has columns for Site Name, Phone Type, MAC Address, Phone IP, Extensions, User Name, DND, Current Load, Switch Interface, Description, Status, and Modify. The table lists several phones, including Arcana-UC520 and Arcana-UC500, with various configurations and statuses.

Site Name	Phone Type	MAC Address	Phone IP	Extensions	User Name	DND	Current Load	Switch Interface	Description	Status	Modify
Arcana-UC520	7975	0022.5550.8031	10.1.2.103	4201 (Ph)	Unni	No	SCCP...			OK	[ID] [MODIFY]
Arcana-UC520	7975	0022.5550.8099	10.1.2.107	4205 (Ph)	Frances	No	SCCP...		Frances	OK	[ID] [MODIFY]
Arcana-UC520	7931	001F.CAEA.1E3A	10.1.2.102	4255 (Ph)	Diana	No	SCCP...		Diana	OK	[ID] [MODIFY]
Arcana-UC520	7975	0021.5553.4DC5	10.1.2.109	4208 (Ph)	Fritz	No	SCCP...		Fritz	OK	[ID] [MODIFY]
Arcana-UC520	7975	0022.5550.8E2C	10.1.2.104	-Not Assigned-	Available	No	SCCP...		Huey	OK	[ID] [MODIFY]
Arcana-UC520	7975	0022.5550.8E35	10.1.2.106	4210 (Ph)	Sarah	No	SCCP...		Sarah	OK	[ID] [MODIFY]
Arcana-UC520	7931	0018.1815.8D51	10.1.2.101	8030 (Ph)	Spare	No	8.1.0...		Spare	OK	[ID] [MODIFY]
Arcana-UC520	7975	0022.5550.8E42	10.1.2.108	4207 (Ph)	Seung	No	SCCP...			OK	[ID] [MODIFY]
Arcana-UC520	7975	0022.5550.9461	10.1.2.105	4204 (Ph)	Button	Primary	Secondary	Name	Direction	Calltr	Trunk
Arcana-UC520	7960	0000.EDAB.3C67	192.168.202.9	4202 (Ph)	1	4202	---	Emly Stenmerich	outgoing	---	---
Arcana-UC520	7960	0000.EDAD.A972	192.168.209.7	4210 (Ph)	2	8020	---	Support	---	---	---
Arcana-UC520	7960	0000.EDAD.A972	192.168.209.7	4210 (Ph)	3	8030	---	General	---	---	---
Arcana-UC520	7940	0012.0198.4661	10.1.1.114	4259 (Ph)	ServerRoom	No	8.0.(5.0)	Fas 019/ 192.168.30.2		OK	[ID] [MODIFY]
Arcana-UC520	7960	0000.EDAD.A407	192.168.201.10	4201 (Ph)	Unni-Home	No	8.0.(5.0)			OK	[ID] [MODIFY]

Email: cs-arcana-solutionsplus@external.cisco.com

ArcanaNetworks ManageExpress



ArcanaNetworks offers easy to use centralised management solution that lowers management cost for customers

ArcanaNetworks ManageExpress iManage 8.0

- Centralised Management
- Bulk changes for moh files, changing AA prompts, business hours
- Provisioning - Day 2 requests such as adding a new phone, resetting a voicemail password, changing security settings, etc using easy to use templates
- Monitoring real time - Real time monitoring information from Syslog, IP SLA probes, Netflow, and SNMP
- Reporting Detailed audit trails provides an insight into the who, what, where, and when actions were performed, including the actual commands that were issued to the device.
- Operation - to expose critical business intelligence information directly to the business user.

of



Utilise ArcanaNetworks ManageExpress to compete against Shoretel, Avaya

Q & A

Complete Your Online Session Evaluation

Complete your session evaluation:

- Directly from your mobile device by visiting www.ciscoliveaustralia.com/mobile and login by entering your badge ID (located on the front of your badge)
- Visit one of the Cisco Live internet stations located throughout the venue
- Open a browser on your own computer to access the Cisco Live onsite portal





CISCO

References and Useful Links

- Communications Manager Express:
 - www.cisco.com/go/ccme
- Cisco Communications Manager Express Data Sheet
 - http://www.cisco.com/en/US/products/sw/voicesw/ps4625/products_data_sheets_list.html
- Cisco Communications Manager Express Compatibility matrix
 - http://www.cisco.com/en/US/products/sw/voicesw/ps4625/products_device_support_tables_list.html
- Cisco Communications Manager Express External Wiki
 - <https://www.myciscocommunity.com/docs/DOC-2098>
- Cisco Communications Manager Express Toll Fraud Prevention Application Note

References and Useful Links

- Communications Manager Express Internal Wiki
 - <http://zed.cisco.com/confluence/display/VOICE/CME>
- Communications Manager Express on Facebook
 - <http://www.facebook.com/home.php?#!/pages/Cisco-Communications-Manager-Express/103167066393948?ref=ts>
- Arcana Networks ManageExpress iManage
 - <http://www.arcananetworks.com/html/imanage.htm>
- CME ordering guide
 - http://www.cisco.com/web/partners/downloads/partner/WWChannels/technology/ipc/downloads/ordering_guide_unified_cme_unity_exp_callconn.pdf

Cisco Unity Express Pricing

- See the Cisco Unity Express Ordering Guide for the latest information
 - http://www.cisco.com/web/partners/downloads/partner/WWChannels/technology/ipc/downloads/oguc_v7-1_ue_v7_1_a_c.pdf
- Send questions about pricing and ordering to
 - access-ccme-cue@cisco.com

References and Useful Links

- Cisco Unity Express wiki (Internal)
 - <http://zed.cisco.com/confluence/display/VOICE/CUE>
- Cisco Unity Express FAQ and Troubleshooting (Internal)
 - <http://zed.cisco.com/confluence/display/VOICE/CUE-FAQ>
- Cisco Unity Express on cisco.com
 - <http://www.cisco.com/en/US/products/sw/voicesw/ps5520/index.html>
- Cisco Unity Express Documentation – release by release listing
 - http://www.cisco.com/en/US/products/sw/voicesw/ps5520/products_documentation_roadmap09186a00803f3e19.html
- Cisco Unity Express compatibility matrix

Mailer Aliases

- Send all questions about features and ordering to access-ccme-cue@cisco.com - this is an alias where customers and partners can send emails to the Marketing team
- Support questions for custom scripts on Unity Express can be sent to ask-cue-editor@external.cisco.com - this can be used by partners and customers as well



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